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**“Judging a book by its cover”: An experimental study of the negative impact of a diagnosis of Borderline Personality disorder on clinicians' judgments of uncomplicated Panic Disorder**

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**Objectives.** Diagnosis is ubiquitous in Psychiatry, and whilst it can bring benefits; adverse effects of “labelling” may also be possible. The present study aimed to evaluate experimentally whether clinicians’ judgements about a patient with panic disorder were influenced by an inappropriately suggested diagnosis of co-morbid borderline personality disorder (BPD).

**Design.** An experimental design was used to evaluate clinician’s judgments when the nature of the information they were given was varied to imply BPD comorbidity.

**Methods.** Two hundred and sixty five clinicians watched a video recorded assessment of a woman describing her experience of uncomplicated “Panic Disorder”, and then rated her present problems and likely prognosis. Prior to watching the video recording, participants were randomly allocated to one of three conditions with written information including; (a) her personal details and general background; (b) the addition of a behavioural description consistent with BPD; (c) the further addition of a “label” (past BPD diagnosis).

**Results.** The BPD label was associated with more negative ratings of the woman’s problems and her prognosis than both information alone and a behavioural description of BPD “symptoms”.

**Conclusions.** Regardless of potential actuarial value of such diagnoses, it is concluded that clinicians can be overly influenced by diagnostic labels in the context of a supposed comorbid problem, although such biases appear to be less likely if a description of the relevant behaviours is used instead. Thus the label, rather than the behaviour it denotes, may be stigmatising in mental health professionals.

## **Practitioner Points**

- Diagnostic labels can have an inappropriately negative effect on clinicians' judgments not only of treatment variables such as engagement and response but also risk issues and interpersonal effectiveness.
- Incorrect diagnostic labels can have a greater effect on clinicians' judgments than a behavioural description or clinical presentation
- Clinicians should therefore be cautious both in the use of diagnostic labels to describe patients and also mindful of the influence that such labels can have on their own clinical judgments and constantly seek to challenge these.
- Behavioural descriptions of difficulties are less likely to result in such negative judgments and predictions.

Psychiatric diagnostic systems provide clinicians with a means of describing a patient's presentation and imply the expected course and prognosis (Garand et al., 2009). Although the value of psychiatric diagnoses has been debated for at least a century, research data has not been a prominent feature of the discussion. The use of diagnostic systems such as DSM (2013) and ICD (1989) have allowed the adoption of operational definitions which, it could be argued, have benefited research and improved the reliability of routine psychiatric diagnosis, although, both the reliability (Aboraya et al., 2006) and validity (Baca-Garcia et al., 2007) of diagnostic systems have been questioned.

In this study we were concerned with the potentially stigmatizing impact of diagnosis. The stigma of mental illness has long been recognised as a significant social issue (Goodyear and Parish, 1978) and it has been suggested that diagnostic labels contribute to this stigmatization process (Skinner et al., 1995). Further, diagnostic labels can have a devastating effect on an

individual's sense of self through a process of internalised-stigma where the individual applies negative public perceptions of mental illness to themselves. This has been shown to impact important factors such as hopefulness, self-esteem and empowerment (Livingstone & Boyd, 2010). Little is known about the impact of diagnostic labels on clinicians' perceptions of people with mental health difficulties and this is fundamentally important as it is likely to have implications for clinical practice and patient outcome (Aviram et al., 2006). Nowhere is this more apparent than in "Axis II", where the adoption of DSM III (American Psychiatric Association, 1980) resulted in a rehabilitation of the discredited concept of personality disorder. It had previously been suggested that labelling a person with personality disorder was a function of misunderstanding and dislike on the part of the clinician (c.f. Arntz, 1999; Ryle, 1997; Sandler, Dare, & Holder, 1973) and was likely to have the effect of prejudicing clinicians towards those so labelled. DSM III was intended to deal with these problems by providing "objective indicators"; but did it? The study conducted here arose from the authors' perception that many clinicians tend to view the "new" diagnosis in much the same stigmatising way as the old.

Studies examining the attitudes of mental health professionals toward individuals with a diagnosis of personality disorder are most consistent with a continuing stigma-related problem. Glen (2005) states that mental health practitioners are uncomfortable about or reluctant to work with, individuals so diagnosed because they perceive them as dangerous and unresponsive. Mental health professionals' attitudes towards such people are more negative and less optimistic about treatment than their attitudes towards people with diagnoses of depression and schizophrenia (Carr-Walker, Bowers, Callaghan, Nijman and Paton, 2004; Markham, 2003; Markham and Trower, 2003). Manning (2002) suggests that personality diagnostic systems are actually intended to provide clarity about and better

descriptions of those suffering from personality disorders, and to identify those likely to be particularly severe or dangerous rather than as a way of predicting treatment response in co-existing disorders.

Ruscio (2004) comprehensively reviewed experimental studies on labelling, concluding that many of the most cited studies are so seriously flawed that it was not possible to conclude that any effects of labelling had been demonstrated. For example, in Temerlin's (1968) study, psychiatrists, clinical psychologists, and clinical psychology graduate students were informed by a "prestigious diagnostician" that the patient on the tape was "a very interesting man because he looked neurotic, but actually was quite psychotic." Participants given the "psychotic" label perceived the patient as significantly more "mentally ill" than those who were not told of this diagnosis. However, Ruscio (2004) points out that to demonstrate the effects of labelling it is important to provide the behavioural data that diagnostic labels denote as this should enable participants to evaluate whether the data accurately corresponds with such labels. In the absence of such data, Ruscio argues "that it is wise to factor the judgement of a well-qualified expert into one's decision unless there are sufficient grounds to completely ignore it".

Similar methodological problems were also noted in another widely known psychological study of labelling by Langer and Abelson (1974). In that study, behavioural and psychoanalytic clinicians watched a videotape of a job interview, with the sound removed. Half the clinicians of each orientation had been told that the interviewee was a patient, the other half that he was a job applicant. It was found that the psychoanalytic but not the behavioural clinicians evaluated the patient more negatively than the job applicant.

Ruscio (2004) points out that previous studies have failed to differentiate labels from the behaviours they supposedly reflect. Ideally, labelling effects should be demonstrated as operating across independent categories; e.g. ethnicity affecting judgements of IQ; gender affecting judgements of job competence; personality disorder affecting judgements of the prognosis of anxiety disorders. Ruscio suggests that studies which use behavioural descriptions have stronger and more consistent results, and that diagnostic labels may merely serve as imperfect ways of communicating behavioural information. However, even such imperfect communication is directly misleading when it is actually wrong. Imperfect information suggests some degree of variation which could be allowed for. False information is actively misleading.

The present study uses an experimental manipulation designed to evaluate the extent to which mental health professionals' attitudes, beliefs, and predictions concerning the treatment of an anxiety disorder are influenced by axis II diagnostic information (borderline personality disorder; BPD) in a patient being assessed for cognitive behaviour therapy for panic disorder and agoraphobia. There is evidence that the presence or absence of BPD is unrelated to treatment response in anxiety disorders (Dreessen and Arntz, 1998), and that the actual presence of such a diagnosis does not substantially affect therapy process (Dreessen, Arntz, Luttels, and Sallaerts, 1994). Nor is there convincing evidence of a negative impact of personality disorder on the outcome of panic disorder in general (Massion, Dyck & Shea, 2002) and the outcome of CBT in particular (Arntz, 1999). However, these studies did show that patients with a BPD diagnosis required more treatment sessions to reach an equivalent level of adjustment.

It was hypothesised here that the diagnostic label would negatively affect mental health professionals' clinical judgements of a patient being assessed for treatment of panic, and that it would significantly add to the impact of behavioural descriptions corresponding to BPD. The diagnostic information given was offered in the form of historical information, and was in fact incorrect, so the BPD diagnosis was inaccurate.

## **Methods**

### ***Participants***

Participants for this study were recruited through Community Mental Health Teams (CMHT) in London and South West areas, from an education establishment, and through a workshop provided for psychologists and psychiatrists. There were 30 psychiatrists, 69 psychologists (clinical and counselling), 55 social workers, 65 community psychiatric nurses, and 46 mental health students on their final year of BSc/Diploma programme. Participant ages ranged from 20 to 60 years (mean = 38.8 years), 95 were male and 170 were female.

### ***Design***

The study aimed to investigate whether or not the diagnosis of BPD would interfere with the clinicians' judgement of a patient with panic disorder. The main hypothesis in this study was that the insertion of the diagnosis of BPD (the label) in the background information would negatively influence participants' judgement of the patient's condition and prognosis relative to neutral information and descriptive behavioural information. In order to demonstrate true labelling effects, descriptive behavioural data over and above the label was examined. A control condition with neither behavioural description nor diagnostic label was also included in order to establish the impact of irrelevant descriptive information. Thus, participants were randomised to three types of information about a patient: (a) the control condition consisted



of background clinical and family details of the patient; (b) the “no label” condition was the same as that of the control, but with the addition of historical behavioural information consistent with borderline personality; (c) the “label” condition was the same as that of the “no label”, but with the addition of a historical diagnosis of BPD (the information offered in this respect was incorrect as the patient had never had detectable axis II problems). Participants were given the background information and then watched a videotape about the patient and were asked to make ratings according to the impression they gained in the videotape, basing their clinical judgement exclusively on the patients’ currently expressed problems as observed in the video.

The video used was unedited material from a TV documentary; the patient volunteered to be part of this documentary, and met the therapist through the production company. She had given a full release to the production company for the use of the material; the section used as the material for the study was not broadcast although other sections were. The therapist had also obtained permission for use of the unedited video for research and training purposes.

### ***Procedure***

The aim of the study was briefly explained in a covering letter as being to examine factors that influenced clinicians’ assessment of a patient with panic disorder and their prediction of the outcome of treatment of her panic disorder. Participants were randomly assigned to one of the three experimental background information conditions; randomisation (which was done by sampling without replacement) resulted in 86, 91 and 88 in control, no label and label conditions respectively. Participants first read general instructions on the task then background information about the patient before watching the videotape and completing the “Clinical Assessment Questionnaire” (CAQ), an instrument designed to elicit clinicians’

attitudes (see below for a description of the scale). The videotape itself was a 10.5 minute extract from the assessment of an actual patient with panic disorder with agoraphobia. The patient in fact had no axis II pathology, and in the tape was highly responsive to questions about (a) the history of the development of her panic attacks, and (b) a recent panic attack. She appears mildly and appropriately emotional and anxious when discussing her feared consequences. It is clear from the videotape that she is co-operative and well motivated to work with the therapist.

### ***Measures***

The Clinical Assessment Questionnaire (CAQ), designed for the present investigation, consisted of twenty-three 0-100 visual-analogue scales tapping clinical judgements of the patient. The referent for the scale was

“We would like to ask some questions about the patient you have just seen in the video. Please base your answer on the impression you have formed from the video itself. We are interested in your judgement of her present problems and conditions. There are no right or wrong answers. We simply wish you to offer your clinical judgement about this particular patient”.

Zero indicated a negative view or the absence of the rated variable, 100 an extremely positive view. For example, in the rating of the likelihood of the patient's responding well to cognitive behaviour therapy, 0 was “not at all likely” and 100 was “extremely likely”. Ratings included: the likelihood of the patient being cured of panic disorder, being a danger to self/others, requiring hospitalisation and professional help, the degree of disability arising from the condition, expected response to treatments (CBT, pharmacotherapy, and a combination of CBT and pharmacotherapy) and to assess the patient's characteristics in the

therapeutic process such as compliant with homework assignments. It was clear in the wording of the specific questionnaire items that the condition being rated was panic attacks.

As this was a relatively new measure, test-retest reliability was examined; 12 clinicians completed the questionnaire following watching the videotape. They were asked to complete the questionnaire again after 24 hours. Table 1 shows the means for assessments 1 and 2 and the correlations for all items. This measure had been previously found (Lam et al, 2005) to have good psychometric properties including excellent test-retest reliability ( $r=0.94-0.89$ ).

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Insert table 1 about here  
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### ***Experimental manipulation***

The experimental manipulation was embedded in the background information given prior to watching the videotape. Three types of background information were introduced in the written preamble to the videotape. In the control condition participants were provided with a brief and accurate description of the patient's experiences with panic attacks and agoraphobia and a brief narrative of her family background:

Susan, aged 37, is a divorced woman with a girl and a boy, aged ten and seven respectively. Both her children are living with her. Her ex-husband has since remarried but has been in regular contact with his children. He takes them on holiday once a year.

Since the divorce five years ago, Susan has been living with her two children. She has a restricted social life because of her anxiety and panic attacks. She is reluctant to go out alone and would often stay at home most of the time because of frequent panic attacks. Prior to most attacks, she experiences intense fear and anxiety. Her thoughts at that moment are that she is going to faint and pass out. She knows that these

thoughts are irrational but finds it difficult to control her anxiety and thoughts. During attacks, she has very unpleasant bodily sensations. Some of the sensations are: breathing very fast; feeling short of breath, as if she cannot get enough air; heart beating very fast; chest pain; shaking and trembling; and feeling faint and dizzy.

Her latest panic attack happened in a supermarket last Sunday. She felt dizzy and was having difficulty breathing. When the bodily sensations became intense, she grasped a chair to sit down. She felt relieved to be able to sit down just in time, believing that her action had just prevented her from fainting and passing out. Even with the support and company of a friend or a relative, she still experiences a high level of anxiety whenever she is in places such as supermarkets, parks and restaurants, etc. The condition has affected her life and daily functioning to the extent that she is now effectively disabled by her problem.

Susan is an attractive and intelligent person, who did well at Further Education College. However, she describes herself as a shy, sensitive and anxious person. She married soon after leaving college and this lasted five years before her husband left her.

Although her childhood was generally happy, she appears to have been a sensitive child. Her father was occasionally violent towards her mother at times, especially after drinking too much. Her parents divorced when she was ten years old. She has had no contact with her father since the divorce, but her relationship with her mother is described as good. She is the eldest in the family and sees both her brother and sister regularly.

Because of her recurrent panic attacks, her General Practitioner recommended her referral to a community psychiatric team for her emotional problems and avoidance behaviour. Neither exposure nor pharmacotherapy was previously effective. She has a long history of contact with psychiatric services for outpatient psychiatric treatment.

In the “no label” condition the same information as in the control condition was used, but with the addition of the following (false) information (as the second last paragraph):

In addition to her anxiety and panic, her General Practitioner said that she complains of feeling vague, dysphoria, insomnia, and confusion about life and her own goals. Previous psychiatric reports commented that she is notably deficient in the skills of symptom management, interpersonal effectiveness, and self-management, of affect regulation and impulse control. The deficit in mood regulation and impulse control are noted as accounting for her mood lability: from inappropriate, intense anger to anxiety, usually lasting for a few hours and sometimes more than a few days.

In the label condition the same information as in the “no label” condition was used, but with the addition of the following (false) information (text below indicates placement of additional material):

At this stage early signs of borderline personality disorder were beginning to be evident (Paragraph 4, after “further education college. However”) ... Susan’s history is typical of someone who suffers from panic disorder with a comorbid Borderline Personality Disorder (Paragraph 5, before “although her childhood”) ... A formal diagnosis of Borderline Personality Disorder was made when she was referred for psychiatric treatment (Paragraph 6, before “in addition to her anxiety and panic”) ... her General Practitioner’s referral indicated that she is suffering from symptoms characteristic of borderline personality disorder (paragraph 6, after “in addition to her anxiety and panic”).

### ***Data analysis***

The questionnaire used in the study assessed mental health professionals’ clinical judgements. 21 items in the questionnaire were categorised into 6 different groups for statistical analysis. This categorisation was based on how closely related the items were to each other in terms of the themes of the information obtained.

Prior to the main analysis, these composite items were each separately entered into a repeated measures ANOVA, with individual items as the repeats factor, and experimental groups as the grouping variable. These analyses were first used to check for group x item interactions;

the lack of such interaction then justified the use of the composites for the main (experimental groups) analysis. Only one composite item was found to have no interactions with the experimental group. This composite item was - “risk of harming self and others”. There were significant interactions between items in the other five composites; these items were therefore treated individually in the main analysis using one way ANOVA, with experimental groups as grouping variable. Where appropriate, further analysis using simple main effects and post hoc Tukey LSD tests was then used to find out which of the experimental groups were significantly different from each other. The threshold for post-hoc tests was set to  $\alpha \leq 0.05$ .

## **Results**

### ***Overview***

A diagnostic psychiatric label of BPD produced more pessimistic views about panic disorder and more negative impressions of the patient.

### ***How curable is her condition?***

There was a main experimental group effect in the measurement of how curable her condition was; multiple comparisons using Tukey LSD test indicated that participants in the label condition perceived the patient as significantly less likely to be curable than those in either the “no label” or control condition. There was no difference in participants’ perceptions in the “no label” and control conditions.

### ***Over what time period would regular treatment sessions be required?***

There was a main experimental group effect in the measurement of the time period over which regular treatments sessions would be required; multiple comparisons indicated that

participants in the label condition perceived the patient as needing a significantly longer period of regular treatment sessions than those in either the “no label” or control conditions. There was no significant difference in the perceptions of professionals in the “no label” and control conditions.

***Would she be compliant with homework assignments?***

There was a main experimental group effect in the measurement of whether she would be compliant with homework assignments; multiple comparisons indicated participants in the label condition regarded the patient as significantly less likely to comply with homework than those in either the control or “no label” conditions. There was no significant difference in the perceptions of professionals in the “no label” and control conditions.

***How motivated to change is she?***

There was a main experimental group effect in the measurement of how motivated she was to change; multiple comparisons indicated that mental health professionals in the label condition perceived the patient as significantly less motivated to change than those in either the control or “no label” conditions with no significant difference between the “no label” and control conditions.

***Risk of harming self and others***

These three items were: “How likely is she to harm herself at present?”, “What is the present likelihood of her attempting suicide?”, “How likely is it that she would harm others?” A one way ANOVA showed that there was a main experimental effect in this composite variable. Multiple comparisons using Tukey LSD tests indicated that participants in the label condition regarded the patient as having a significantly higher risk of harming self and others than

those in the “no label” and control conditions. There was also a significant difference between judgements of participants in the “no label” and control conditions.

***How well would she respond to cognitive behaviour therapy?***

There was a main experimental group effect in the measurement of how well the patient would respond to cognitive behaviour therapy; multiple comparisons indicated that participants in the label condition regarded the patient as responding significantly less well to cognitive behaviour therapy than those in either the “no label” or control conditions. There was no significant difference between the “no label” and control conditions.

***Would it be likely that her interpersonal relationships improve following treatment?***

There was a main experimental group effect in this variable; multiple comparisons indicated that participants in the label condition perceived the patient as significantly less likely to improve her interpersonal relationships following treatment than those in either the “no label” or control conditions. There was no significant difference in the perceptions of the professionals in the “no label” and control conditions.

Table 2 shows the means and standard deviations of the experimental condition in the variables that were found to be statistical significant; findings are discussed in detail below.

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Insert table 2 about here

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***Analysis of professional groups***



The analysis used repeat measures analysis of variances with item type as repeats factor and professional group as grouping variable. Where significant results were found, univariate (simple main effects) analysis and Tukey LSD tests were carried out.

One way analysis of variance showed that there were interactions between professional and experimental groups in 'how likely it is that she would be able to be free of panic attacks following treatment'. Although the main effect of the experimental groups' factor was also observed, the presence of interactions modified the main effects, indicating that experimental effects were different across the professional groups in this variable in this study. Univariate Analysis of Variance (simple main effects) was used to further analyse the extent of the experimental effects on each of the professional groups. Significant experimental group effects were found in registered nurses,  $F_{[2,63]} = 7.347$ ;  $p < 0.001$ ; mental health student nurses,  $F_{[2,43]} = 4.368$ ;  $p < 0.019$  and psychiatrists,  $F_{[2,27]} = 4.224$ ;  $p < 0.025$ ; but not in social workers and psychologists' groups ( $p < 0.05$ , Tukey LSD).

## **Discussion**

The study simulates a commonly occurring clinical situation where an assessment is conducted in the context of potentially prejudicial prior information. Results indicated that a behavioural description of a history corresponding to BPD did not impact on clinicians' judgements relative to controls who were not offered any information of this kind. However, the further addition of historical information involving a previous explicit diagnostic label of BPD was associated with significantly more negative clinical judgements about the outcome of panic disorder, elevated estimates of general risks concerning harm to self and others and lower ratings of likely future engagement in therapy and outcome. If this were a current

diagnosis, it could be argued that more negative judgements regarding some of the items would be justified such as that the patient might require longer treatment for her panic disorder and also might be a higher risk to self and others, however, a historical diagnosis should not have this influence. Further, there is no evidence base to support the linking of even a current BPD diagnosis with poorer engagement in treatment or outcome.

Panic disorder with agoraphobia was chosen in the present study for three reasons. Firstly, this diagnosis is generally regarded as specific and anxiety related rather than an aspect of the sufferer's personality. Secondly, the treatment is typically highly effective and, in most cases, normally requires a short period of treatment ranging from 5-12 sessions (Clark et al., 1999). Thirdly, research indicates that comorbid BPD is almost certainly not associated with a poorer response to CBT for the anxiety problem (Arntz, 1999). Arntz (1999, p97) points out that "personality disorders are not a contraindication for cognitive-behavioural treatment of Axis-I problems," meaning that such problems have no actuarial value for the effectiveness of treatment for panic or other anxiety problems. In the present study we specifically chose a label which was both factually incorrect and actuarially irrelevant to the disorder in question (panic disorder). Note, however, that Arntz's work indicates that patients with a diagnosis of BPD typically start at a higher level of anxiety severity and improve at the same rate. They therefore require additional therapy sessions in order to ensure that their anxiety is reduced to a comparable level relative to those without a BPD diagnosis. This means that, were the diagnosis accurate, there is some justification for the clinicians' judgement that, in the "label" condition, more treatment sessions might be required. Note however that in this instance the label was not correct.

As the videotaped assessment shown in the present study focussed on what was evidently a straightforward panic disorder in an intelligent and responsive patient (who definitely did not have a diagnosis of BPD), one would hope that clinicians would form a realistic clinical judgement. Participants were explicitly asked to base their judgement on the impression they formed from the videotape itself in terms of judgement of the patient's present problems and condition; the (false) BPD relevant information was clearly described as historical. Findings suggest that the label (rather than the behaviours it may have denoted) was responsible for the experimental effects observed. It is interesting (and perhaps alarming) to consider what the impact of the labelling intervention would have been on the effects observed had the patient on the videotape showed signs of more erratic behaviour, which may have further amplified the effects observed. This is important as therapist and patient expectancies influence actual outcomes; in the case of therapist expectancies, the effect occurs independently of therapeutic alliance (Mayer, et al., 2002). We have previously noted similar effects on the attitudes of a community sample when specifying biological or psychological causes of "mental illness" (Lam, Salkovskis, & Warwick, 2005). Although the video contained examples of appropriate emotional expression, it did not include any discussion of BPD relevant behaviours, as obviously this would have contaminated the control condition.

Ruscio (2004) highlighted the need for research separating a label from the behaviours that it denotes, an explicit feature of the present study. He also points out that some labels previously studied may have had an impact because they may have real actuarial value. We dealt with both of these issues in the present study by including a description of behaviours which would fulfil criteria for BPD with and without the actual diagnostic label; the diagnosis will not have greater actuarial value than a description of the behaviours used to make it; the more detailed description of the behaviour may provide a better prediction than

the diagnostic label, which is by definition over-inclusive, including all features which might occur in the diagnosis rather than just those which apply to the individual so diagnosed. For example, violence and self harm were not mentioned in the behavioural description used in the present experiment, but in the label condition (and not the behavioural description condition) these were rated as more likely to occur in the patient seen on videotape, presumably because they can be a feature of some people who receive a BPD diagnosis.

Inappropriate expectations may be generated by labelling from two obvious sources. Firstly, any particular label may be subject to high levels of uncertainty, unreliability and instability. Secondly, there is a real possibility that statistical links reported between outcome and BPD in the research literature are so weak that when applied to the individual in a clinical context their predictive value is limited, and may distract the clinician from stronger and more reliable predictors. Garb (1998) suggests that for a patient with more than one psychiatric problem, a clinician may fail to attend to other symptoms to make an additional diagnosis once an initial diagnosis is made. This may be because the initial diagnosis can be so salient that it inhibits clinicians' processing of information related to a second clinical problem. The diagnosis of BPD in the present study could have been so salient that it clouded professionals' judgement of the patient seen on the video, although why the label would do so more than the behaviours which it denotes is particularly interesting and worrying. This might suggest some kind of stereotyping or even prejudice may be operating. This unhelpful effect of diagnosis is particularly concerning given the trend apparent in DSM V to both increase diagnostic categories and lower diagnostic thresholds (Ben-Zeev et al., 2010) and, specifically in the field of personality disorder, to facilitate an increase in the diagnosis of BPD.

An obvious conclusion from the present study is that those applying diagnostic labels in psychology and psychiatry should consider not only their actuarial value (in the case of a clearly present diagnosis), but also the potential negative impact of such diagnoses (Link and Phellan, 2001). For example, a study conducted by Pitt et al. (2009) explored the impact of diagnosis on individuals in a qualitative study and found that diagnostic labels can disempower the individual and be a cause of social exclusion. Personality disorder is a particularly good example of this problem because (a) it is notoriously unreliable even when structured interviews are used (and in routine clinical practice they seldom are); (b) predictive validity for factors such as harm are very low and (c) once the diagnosis is made and recorded it becomes lifelong, so the best outcome that can be hoped for is a change of diagnosis to “personality disorder in remission”. A diagnosis of personality disorder could therefore be viewed as a “life sentence”. Sadly, little research attention has thus far paid attention to the adverse impact of psychiatric diagnosis despite well-documented evidence of such effects across professional groups (Black et al., 2011, Bodner et al, 2011) and some recent evidence to suggest that training can have a positive impact (Shanks et al., 2011; Saunders et al., 2012). We have little information about the impact of other diagnoses, although there is evidence of adverse effects in the diagnosis of “schizophrenia” (Birchwood, Mason, MacMillan, & Healy, 1993). Future research should consider identifying the extent to which participants actually understood the potential significance and salience of the behavioural description and the actual label. Also, it would be good to include in future studies a measure of how able clinicians are to use the video to make judgements.

The observation made here that an irrelevant psychiatric diagnosis can negatively influence clinical judgement suggests that diagnostic criteria should be used as guidelines rather than prescriptively. Clinicians should be aware that they may be prejudiced in how they perceive

people to whom such labels apply, and should question the actuarial value of such labels. The perception of poorer outcome may come from older research on the outcome of anxiety disorders with and without BPD. Research suggested that comorbidity of BPD and anxiety may result in poorer outcomes in both directions (Nurnberg, Raskin, Levine, Pollack, Simcha et al, 1989). However, research on newer CBT approaches to the treatment of anxiety suggests either the absence of any negative effects (Arntz et al 1999; Dreessen and Arntz, 1998; Dreessen and Arntz 199; Dreessen, Arntz, Luttels and Sallaerts 1994; Sanderson, Beck and McGinn, 2002), or that effects are too small to be detected in the studies carried out. It is of course possible that participants in the present study were unaware of the more recent evidence indicating a lack of relationship between BPD and the outcome of CBT for panic; this does not alter our conclusions about the effect, but needs to be considered as a possible mechanism. It is, of course, important that clinicians keep abreast of the evidence-base. It would be an interesting future research question as to whether awareness of the evidence base mitigated against the labelling effect demonstrated here.

The present study closely followed the principles set out by Ruscio (2004) in that it compared diagnostic labels with the behaviours they are understood to denote; confounding these two variables is a methodological flaw identified by Ruscio in previous research on the effects of labelling. Interestingly, the results obtained in this study differed somewhat from those Ruscio might have predicted i.e. it was the addition of a diagnostic label that influenced clinician's judgements rather than a description of their behaviour. It could be argued that it is important that clinicians take account of "expert" opinion represented here by the reported opinion of a psychiatrist; however, in this study we have also demonstrated the dangers inherent in this as in this case the diagnosis was fallacious. Further, the fact that current evidence would suggest that the diagnosis had no bearing on likely treatment outcome again

would suggest that over-reliance on diagnosis as a way of making important clinical decisions about patient care is risky without adequate knowledge of what the diagnosis means in this context. As with the other findings, this does not indicate that diagnoses are meaningless and we would concur with Ruscio that a method of classification is helpful where it results in matching patients with appropriate treatments. However, it is crucial that such classification is both accurate and used by clinicians who are well informed of the relevant evidence base. We would agree with Ruscio that this underscores the importance of continuing professional development.

This paper is entitled “Judging a book by its cover”. As clinicians we should guard against this type of prejudice. Worse, we may at times be exposed to an incorrect “cover”. The patient on the videotape used in the present study was inappropriately given the diagnosis of BPD; this is consistent with a conclusion that mistaken or carelessly worded diagnosis can have a negative effect on clinicians’ perceptions and assessment of patients they see. Adverse effects may be manifest in terms of clinicians’ attitudes towards the patient, their therapeutic approach and their expectations of success and ultimately clinical outcomes.

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Variable	Test 1 (Mean)	Test 2 (Mean)	r value
How likely is she to harm herself at present?	13.3	14.2	.905
What is the present likelihood of her attempting suicide?	13.3	15	.860
How disabling is her present condition?	73.3	72.5	.785
Is intensive professional help essential?	80.8	78.3	.989
Is hospitalisation likely to be required for her problems	15.8	14.2	.676
How likely is it that she would harm others?	11.7	10	.791
How likely is it that she would relapse if her panic and agoraphobia were treated using cognitive behaviour therapy?	45.8	45.8	.946
How likely is it that she would drop out from cognitive behaviour therapy?	25	24.2	.611
How easily could she be engaged during therapeutic sessions?	70.8	67.5	.798
Would she be compliant with homework assignments?	65	63.3	.728
Would she be likely to become too dependent on the therapist?	42.5	41.7	.845
How motivated to change is she?	67.5	67.5	.768
How well would she respond to cognitive behaviour therapy?	84.2	81.2	.96
How well would she respond to appropriate pharmacotherapy?	30	28.3	.902
How well would she respond to a combination of cognitive behaviour therapy and pharmacotherapy?	77.5	73.3	.858
How easily would you find establishing and maintaining a rapport with this patient?	70.8	69.2	.929
How likely is it that she would be able to be free of panic attacks following treatment?	72.5	73.3	.848
How likely that she would be able to be free of situational avoidance following treatment?	62.5	61.7	.965
Would it be likely that her interpersonal relationships improve following treatment?	75	71.7	.891
What percentage of therapeutic sessions would you expect the patient to miss?	11.3	12.5	.802
How curable is her condition?	78.3	76.7	.892
What do you expect the duration of this patient's treatment to be?	11.7	12.2	.914
What do you expect the average length of each of session to be?	54.2	54.2	1.0
Over what time period would regular treatment sessions be required?	3.9	3.9	1.0

**Table 1: Test-retest information for scale used; means and test-retest correlations for all items**

	Mean [Standard deviation]			Significance	Between group differences (Tukey LSD)
	Control	No label	Label		
How curable is her condition?	75.3[17.5]	77.5[15.7]	63.5[20.3]	$F_{[2,250]} = 13.92; p < 0.0001$	Label < no label & control No label = control
Over what time period would regular treatment sessions be required?	4.95[2.5]	5.3[3.2]	6.9[4.9]	$F_{[2,250]} = 4.327; p < 0.014$	Label > no label & control No label = control
Would she be compliant with homework assignments?	63[17]	60.6[20]	53.4[18]	$F_{[2,250]} = 6.868; p < 0.001$	Label < no label & control No label = control
How motivated to change is she?	66.3 [17.3]	66.4[18.4]	59.4[17]	$F_{[2,250]} = 4.669; p < 0.01$	Label < no label & control No label = control
Risk of harming self and others? (composite)	9.89[12]	13.8[15.5]	18.4[18.3]	$F_{[2,250]} = 10.99; p < 0.0001$	Label > no label > control
How well would she respond to cognitive behaviour therapy?	71.5[13.5]	71[14.3]	65.5[15]	$F_{[2,250]} = 4.49; p < 0.012$	Label < no label & control No label = control
Would it be likely that her interpersonal relationships improve following treatment?	68.8[16.3]	71.2[18]	60[17.3]	$F_{[2,250]} = 9.4; p < 0.0001$	Label < no label & control No label = control

**Table 2: means, standard deviations (brackets), and statistical comparison of between group differences**